

### **R E M A R K S**

In the present communication, Claim 172 has been amended. No claims have been added or cancelled. As such, Claims 172-197 are currently pending. The Examiner's rejections are as follows:

I) Claims 172, 174, and 195 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Kurn (20020058270) in view of Dai et al. (Genes & Development, vol. 12, pages 2782-2790, 1998);

II) Claims 173 and 175-186, 194 and 195 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Kurn, in view of Dai et al., in view of Kacian (U.S. 5,399,491), and further in view of Ginsberg et al.; and

III) Claims 187-193, 196 and 197 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Kurn, in view of Dai et al., in view of Kacian, in view of Ginsberg et al., and further in view of Diegelman et al. (Nucleic Acids Research, vol. 26, pages 3235-3241, 1998).

#### **I. Objections to Claims 172, 174, and 195**

The Examiner issued an obviousness rejection of Claims 172, 174, and 195 over Kurn, in view of Dai et al. The Examiner stated that, while Kurn did not teach an RNA polymerase that transcribes RNA using a single-stranded promoter, Dai taught this feature. While Applicants disagree with this rejection, in order to further the prosecution of the present application, without acquiescing to the Examiner's rejection, while reserving the right to prosecute the original or similar claims in the future, the claims have been amended. In particular, Claim 172 has been amended to recite that the RNA polymerase "is an N4 mini-vRNAP or the Y678F mutant of said mini-vRNAP." Support for this amendment is found throughout the specification, such as for example in paragraph [0072]. Surprisingly, N4 mini-vRNAP deletion mutants, which comprise only about one-third of the amino acids of the wild-type phage N4 vRNAP known in the art, is fully active for *in vitro* transcription. The cited references do not teach, for example, the use of such RNA polymerases in the claimed methods. As such, Applicants submit that this rejection should be withdrawn.

### **II-III. Additional Obviousness Rejections**

The Examiner issued a number of additional obviousness rejections based on Kurn, in view of Dai et al., and further in view of Kacian, Ginsberg et al., and/or Diegelman et al. Applicants respectfully disagree with these rejections and submit that they are moot in view of the amendment discussed above as the cited references do not teach, for example, the use of an N4 mini-vRNAP or the Y678F mutant of thereof in the claimed methods.

With respect to Claim 190, the Applicant also wishes to point out that none of the references cited by the Examiner (Kurn, Dai et al., Kacian, Ginsberg et al., or Diegelman et al.) teaches a method for using a sense promoter primer to make a transcription substrate, which in turn can be used to make a transcription product. All of the references cited use only an oligonucleotide that exhibits an anti-sense promoter sequence. As such, this is an additional reason Claim 190 should be allowed.

### **CONCLUSION**

Should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicants encourage the Examiner to call the undersigned at 608-218-6900.

Dated: August 7, 2009

/ Jason R. Bond /  
Jason R. Bond  
Registration No. 45,439

CASIMIR JONES S.C.  
440 Science Drive, Suite 203  
Madison, WI 53711  
608.218.6900